State of Hawai'i Department of Land and Natural Resources Division of State Parks Honolulu, Hawai'i

June 10, 2010

Board of Land and Natural Resources State of Hawai'i Honolulu, Hawai'i

Subject: Request Approval to Enter into Memorandum of Agreement between the

Department of Land and Natural Resources and the National Park Service to Repair and Stabilize Archaeological Sites Damaged by the October 2006 Earthquakes; Lapakahi State Historical Park, North Kohala, Hawai'i Island, Tax

Map Key (3) 5-7-001: 002.

Statute: Act 78, SLH 2007; Act 76, SLH 2009 (Appropriations)

Background:

On October 15, 2006, a series of large earthquakes off of the west coast of Hawai'i Island caused considerable damage to the stone habitation complexes at Lapakahi State Historical Park, North Kohala. These complexes, comprised primarily of stone-wall enclosures and stone platforms, are the remnants of a native Hawaiian coastal village that has been the focal point of the park's interpretive programs since the 262 acre park opened to the public in 1975. Park users can fallow paths through the village complex where interpretive signs and a brochure designed for self-guided tours portray the village's past and the lives of those who lived there. An estimated 30,000 visitors stopped at the park in 2007. The Lapakahi Complex (#50-10-02-2254), which includes the park, was listed in the National Register of Historic Places in 1973.

In late 2006 and early 2007, an earthquake damage assessment of the park's archaeological complex was prepared by a joint team from the Federal Emergency Management Agency (FEMA) and the Division of State Parks (State Parks). A total of 260 damaged wall segments were identified within the main Koai'e Village Complex and in smaller, peripheral complexes on the hillside. They estimated repair and stabilization costs to be approximately \$143,000. Of this total, \$110,615 would be funded through the Hawai'i State Legislature's 2007 emergency appropriation for natural disasters (Act 78, SLH 2007; Act 76, SLH 2009) which specified "parks" as one of the recipients of this appropriation. FEMA is still in the process of determining if it will provide the \$32,385 it set aside for this project. State Parks must encumber the \$110,615 of state funds by June 30, 2010 whether or not the \$32,385 FEMA reimbursement ever materializes.

State Parks is proposing to encumber these state funds through a Memorandum of Agreement (MOA) between the Department of Land and Natural Resources (DLNR) and the National Park Service (NPS). The funds would be used by the NPS Hawaiian Legacy Program to pay the program's master tradesmen, small masonry crew, and a historic preservation specialist to undertake and oversee the repair and stabilization work. The tradesman and crew are all skilled and experienced in traditional Hawaiian dry-set stone masonry and have completed a number of significant repair and stabilization projects in Hawaii's National Parks. The funds would also support educational and community workshops that are an integral part of the NPS legacy program. In addition, the project will provide a training opportunity for interested State Parks maintenance crews. State Parks is seeking Board approval to enter into the proposed MOA for this purpose (See Draft MOA, Exhibit A).

Discussion:

Several factors prompted the establishment of the NPS Hawaiian Legacy Program (Exhibit B). Staff of the three West Hawaii parks, Pu'ukohola Heiau National Historic Site, Pu'uhonua o Hōnaunau National Historic Park, and Kaloko-Honokohau National Historic Park, became increasingly concerned about the retirement of long-time park employees who were skilled in traditional Hawaiian trades and crafts and, conversely, the growing difficulty of recruiting new staff with these needed skill sets. This knowledgeable base had, over the years, allowed NPS maintenance crews to care for the parks' archaeological and cultural resources appropriately and park interpreters to convey a deeper sense of Hawai'i's past, either through their presentations or demonstrations of craft and trades. A deliberate effort was needed to actively create opportunities in which traditional trades and crafts could be passed to a next generation. By emphasizing volunteers and workshops as a standard part of the legacy program, NPS also hoped to increase the broader community's capacity to provide these skills when needed, not only for NPS projects, but for those of state agencies and private entities that share the same goals and mandates of preserving Hawaii's cultural past and perpetuating native Hawaiian activities.

While the need for training programs was clearly apparent, it was the 2006 Kiholo earthquake that created an opportunity to more fully develop the Hawaiian Legacy Program and fostered its current focus on traditional dry-stack masonry (i.e., the practice of layering, setting, and interlocking stones to construct stable walls or platforms without mortar or cement). The earthquake heavily damaged significant portions of Pu'ukohola Heiau, the monumental stone structure overlooking Kawaihae Bay. Federal funds to repair and stabilize the *heiau* were sufficient to allow NPS to hire larger crews and historic preservation specialists to work with master tradesmen and skilled crews that had gained experience reconstructing the massive Kaloko Fishpond wall at Kaloko-Honokohau National Historic Park. The efforts at Pu'ukohola Heiau also had the capacity to train volunteers and conduct workshops. Staff was also able to ensure that routine procedures met Occupational Safety and Health Administration (OSHA) requirements and clarified how this traditional trade would, in practice, meet the Secretary of Interior's Standards for the Treatment of Historic Properties, a requirement of the historic preservation review process under the National Historic Preservation Act. These crews have subsequently

worked on a number of successful stone-wall repair and stabilization projects in other National Parks in Hawai'i.

Most of these skilled crew members are not supported by NPS general operating funds but rely instead on project-specific or external funding. The proposed MOA between NPS and DLNR would allow NPS to keep these crews employed and contribute to the program's perpetuation. Crews generally include one master mason, three to four skilled crew members, and a historic preservation specialist, usually an archaeologist, to monitor and record the work. Under this agreement, State Parks will benefit by having the damaged archaeological sites at Lapakahi repaired and stabilized at a high and proven level of workmanship that might not be matched by private contractors with the funds available. The volunteer and workshop component of the program will provide training opportunities for the Kohala community and for groups or individuals with existing ties to the park and will help raise awareness of State Parks interpretive programs. Particularly important is including interested State Parks maintenance staff in these training opportunities so that staff can better care for State Parks' historic resources in-house. The MOA will set out the respective responsibilities of NPS and DLNR in this effort, including compliance with any applicable state or federal regulations (Exhibit A). A scope of work attached to the MOA specifies the work tasks to be performed by NPS crews and the final work products expected.

Also making this work possible is a 2009 archaeological preservation plan prepared by State Parks for the anticipated mitigation work at Lapakahi State Historical Park. 1 This plan was required by FEMA for project evaluation and compliance purposes but now provides a solid foundation for the work proposed under the MOA. The plan includes a review of the large body of archaeological work done within Lapakahi State Historical Park since 1967, including feature-specific summaries of information recorded for each designated feature in the complex, wall type and construction method for each feature, and any recorded alterations or previous repair work. This information is cross-referenced to the 2006 and 2007 post-earthquake damage assessments done by FEMA and State Parks. The plan also discusses in detail the appropriate preservation measures and techniques that should be used to repair these particular types of archaeological features. All are those currently being used by the NPS Hawaiian Legacy Program. An important first step in implementing the plan and the MOA will be identifying which features should be given priority if funding is not sufficient to repair all recorded damage. Priority will be given to a feature or complex if the work is critical to maintaining the historic and structural integrity of the resource or if it is visible to the public and part of on-going interpretive efforts.

Note that the expenditure of these state funds through a MOA is possible, in part, because the Governor's disaster emergency relief proclamation of October 15, 2006 exempted funds appropriated for disaster relief from the state procurement code.

¹ Maigret, MaryAnn. Archaeological Preservation Plan for Repair and Stabilization of Archaeological Sites Damaged by the October 15, 2006 Earthquake. Prepared by the Archaeology Program, Division of State Parks, Department of Land and Natural Resource, State of Hawai'i, July 2009.

Recommendations: That the Board:

- 1) Authorize the Department of Land and Natural Resources to enter into a Memorandum of Agreement with the National Park Service for the purpose of repairing and stabilizing archaeological stone-wall sites at Lapakahi State Historical Park, subject to review and approval as to form by the Attorney General and such other terms and conditions as may be prescribed by the Chairperson to serve the interest of the state.
- 2) Authorize the Chairperson as its designee to approve any revisions or amendments to the Memorandum of Agreement as needed.

Respectfully submitted,

DANIEL S. QUINN

State Parks Administrator

APPROVED FOR SUBMITTAL:

LAURA H. THIELEN, Chairperson

Exhibit A

Draft Memorandum of Agreement and Scope of Services

Memorandum of Agreement
Between
State of Hawaii
Division of State Parks
And
National Park Service
Puukohola Heiau National Historic Site
For

Stabilization of Earthquake-Damaged Walls at Lapakahi State Historical Park

This Memorandum of Agreement (MOA) is hereby entered into by and between the State of Hawaii, Department of Land and Natural Resources, Division of State Parks (DLNR) and the National Park Service (NPS), referred to collectively herein as "the Parties".

RECITALS

WHEREAS, Hawai'i State Legislature in 2007 appropriated disaster emergency relief funds to be used by DLNR for earthquake damage repair and a sum of \$110,615 of these funds was set aside for the repair of 2006 earthquake damage to Lapakahi State Historical Park and,

WHEREAS, DLNR and the NPS have agreed to partner on the stabilization of earthquake-damaged walls at Lapakahi State Historical Park to meet both the needs of the State Park and the NPS; and,

WHEREAS, the NPS, Puukohola Heiau National Historic Site has the expertise to repair Hawaiian dryset architectural features; and,

WHEREAS, the NPS is authorized by 16 U.S.C § 1b (5); 42 U.S.C. 4331 National Environmental Policy Act of 1969, as amended; NPS has jurisdiction regarding NPS trust resources as provided under the NPS Organic Act (1916), National Park and Recreation Act (1978), and the National Parks Omnibus Management Act (1998); and Department of Interior, Environmental and Related Agencies Appropriations Act of 2008 – HR 2643; and,

WHEREAS, the boundaries of Lapakahi State Historical Park are entirely within the Lapakahi Historical District, which is listed on both the State and National Register(s) of Historic Places and,

WHEREAS, the NPS and DLNR, under a Memorandum of Understanding (MOU), for the implementation, management, protection and public use of Ala Kahakai National Historic Trail: Article III, Sect. A No.7 states "The parties are not obligated to commit resources or to participate in obtaining funds unless such commitments are a part of a specific, separate agreement. Parties can enter into specific agreements and working plans for implementation of individual projects, hiring of personnel, transfer of funds, purchasing of supplies, and other matters."

WHEREAS, the NPS, the approximately 175-mile long Ala Kahakai National Historic Trail traverses both federal, state, county, and private land and contains sensitive Hawaiian cultural and natural resources including Lapakahi State Historical Park.

WHEREAS, DLNR is committed to provide financial resources for the expenses in the amount of \$110,615 related to the stabilization of earthquake-damaged walls at Lapakahi State Historical Park to be led by the NPS, Puukohola Heiau National Historic Site.

I. NPS and DLNR responsibilities:

a. NPS shall:

- i. Coordinate with DLNR on all planning, scheduling, public input, and review of stabilization activities.
- ii. Assign a representative(s) to be the primary contact/liaison between the NPS and DLNR. This person(s) will attend all planning meetings and be responsible for reporting progress information to the NPS.
- iii. Manage funding provided by DLNR for the stabilization of earthquake-damaged walls at Lapakahi State Historical Park. An independent account code will be established to track expenditures of the stabilization project.
- iv. Provide DLNR for approval, a copy of the scope of work and task order before awarding the contract.
- v. Partner with DLNR and local community to provide traditional Hawaiian masonry workshops as part of the stabilization project, as feasible.
- vi. Provide meeting space for the various planning sessions including local public input, design team meeting.
- vii. Provide DLNR with baseline documentation and stabilization services as described in an agreed upon scope of work.

b. **DLNR** shall:

- i. Complete Pre-Design Environmental/Historic Preservation and consultation services which will evaluate the needs of the renovation, operations, preliminary construction costs, environmental/cultural impacts and future funding strategies for construction.
- ii. Provide funding in the amount of \$110,615 to the NPS to cover the cost of archaeological baseline documentation, stone masons, and an archeological monitor for the stabilization of earthquake-damaged walls at Lapakahi State Historical Park.
- iii. Partner with the NPS on the stabilization of earthquake-damaged walls at Lapakahi State Historical Park to meet both the needs of NPS and DLNR.

iv. Assign a representative(s) to be the primary contact/liaison between the NPS and DLNR. This person(s) will attend all planning meetings and be responsible for reporting progress information to the DLNR.

II. Project Coordinators:

Unless otherwise designated, NPS and DLNR designate the following individuals as principal contacts for the work outlined in this Agreement.

National Park Service:

Daniel K. Kawaiaea Jr.
Superintendent
Puukohola Heiau National Historic Site
62-3601 Kawaihae Road
Kawaihae, Hawaii 96743
808-882-7218
Daniel_kawaiaea@nps.gov

State of Hawaii:

Laura Thielen Chairperson Department of Land and Natural Resources P.O. Box 621 Honolulu, HI 96809

III. Indemnification:

A. NPS Agrees:

To cooperate to the extent allowed by law, in the submission of claims pursuant to Title 28 of the United States Code, the Federal Tort Claims Act, against the United States for personal injuries or property damage resulting from the negligent or wrongful act or omission of any employee of the United States

B. DLNR Agrees:

To the extent permitted by law, DLNR shall indemnify, defend, and hold harmless the United States and the National Park Service, and their officers, employees, and agents from and against all claims, suits, actions, losses, damages, liabilities, costs and expenses of any nature whatsoever now or hereafter that result from, arise out of, or relate to the activities of State Parks or its employees, contractors, subcontractors provided by this MOA.

IV. Term of Agreement:

NPS Agreement Number:

This MOA shall become effective on the date of the last signature herein and extend through December 31, 2011.

V. Modification and Termination:

This MOA may be modified or terminated upon mutual written agreement by State Parks and NPS, or upon 30 days written notice by either of the Parties to the other.

VI. General Provisions:

- a. Nothing herein shall or shall be construed to obligate the National Park Service to expend or involve the United States of America in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively allotted and allocated for the purposes and Project contemplated in this MOA. Appropriations to complete the Project have not been authorized, nor have initial appropriations have been made, or funds requested for the Project.
- b. No member of or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of the MOA or to any benefit that may arise out of it.
- c. This Agreement was not executed for the benefit of any entity or person who is not a party hereto, and neither this agreement, nor any interest therein, may be assigned without the prior consent of the non-assigning party.
- d. This Agreement does not give rise to third party contract rights and cannot be enforced by third parties.
- e. This Agreement shall not be construed or implied that either DLNR or the NPS, by entering into this Agreement, intends to abrogate their obligations and duties to comply with all applicable provisions of the regulations promulgated under the National Environmental Policy Act of 1969 or any other applicable law.
- f. NPS Standard Agreement Clauses are attached and incorporated as part of this Agreement.

VII. Attachments:

Attachment I: Scope of Services

NPS Agreement	Number
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National Park Service Puukohola Heiau National Historic Site	State of Hawaii
Daniel K. Kawaiaea Jr. Superintendent	Laura Thielen Chairperson, DLNR
Date	Date

ATTACHMENT I: Scope of Services

REPAIR OF EARTHQUAKE DAMAGED STONE WALLS AT LAPAKAHI STATE HISTORICAL PARK, HAWAII ISLAND, HAWAII

SCOPE OF SERVICES

The Contractor will provide preservation treatment for earthquake-damaged stone features at Lapakahi State Historical Park with an integrated team of masons, archaeologists, and trainees. These tasks will be performed in a manner consistent with the goals, values, and past practices of the National Park Service Hawaiian Legacy Program. The specific form of preservation treatment is stabilization of existing damaged stone walls. The tasks will be carried out following the guidance provided in the Secretary of the Interior's Standards and Guidelines for the Archaeology and Historic Preservation, the Secretary of the Interior's Standards for the Treatment of Historic Properties, and NPS-28 Cultural Resource Management. Conditions:

- 1. Repair by conserving existing materials; no building material will be introduced from outside the immediate context;
- 2. Retain the historic character of the properties (sites) by avoiding replacement of intact or repairable historic materials;
- 3. Repair and thus stabilize the damaged portions of the structures so they are physically and visually compatible with the original portions of the structure;
- 4. Preserve distinctive materials, features, finishes and construction techniques:
- 5. Evaluate the appropriate level of intervention (amount of feature construction that will be repaired/altered, quality and condition of building material), and where the severity of deterioration requires repair or limited replacement of a distinctive feature, select replacement material to match the old in composition, design, color, and texture:
- 6. No chemical or physical treatments are permitted;
- 7. Protect and preserve in-place archaeological resources, and if such resources are disturbed, will undertake mitigation measures as described in scope of work, in consultation with State Parks.

The Contractor will repair stone features through the following steps:

Conditions:

- 1. Identify features where temporary ladders/external stabilization devises are needed, procure materials needed for such devises and construct such devises;
- 2. Remove rubble overburden from wall bases to expose foundation stones;
- 3. Disassemble wall upper courses and/or intact wall adjacent to damaged segments and reassemble if necessary to stabilize damaged sections;
- 4. Re-set damaged wall sections using drylaid (mortarless) style of masonry;

5. Excavate soils under or around wall foundation stones only if necessity for doing so has been established through consultation with State Parks archaeologist (see contingencies);

The Contractor will document archaeological conditions before, during and after completion of the project.

Conditions:

- 1. Include archaeological monitor as part of the stabilization preservation team;
- 2. Photograph walls to be repaired prior to commencing work;
- 3. Update written feature descriptions if existing description determined inaccurate or incomplete (dimensions, setting, soil type, condition, construction style);
- 4. Map the archaeological features to be repaired prior to commencing rubble removal at a scale sufficient to depict the position of intact foundation stones;
- 5. Photograph archaeological features following rubble removal and prior to commencement of repairs;
- 6. Photograph archaeological features following repairs.

The Contractor will produce a written report following conclusion of repairs.

Report will include:

- 1. Descriptions of repaired structures;
- 2. Summary of repair actions taken at each feature;
- 3. Photos and maps of repaired features:
- 4. Description of archaeological features encountered during repairs with profile representation of feature location(s);
- 5. Photographs of any artifacts encountered during repair, in situ (if possible) and with reference scale.
- 6. Summary table of archaeological feature and artifact data.

Contingencies

- 1. Undocumented minor repairs, restoration, or reconstructions may have been undertaken between 1970 and the present at Lapakahi. Where obvious discrepancies are noted between the existing archaeological maps and current conditions at structures to be repaired (such as filled enclosure entrances or new wall extensions), such conditions will be documented. Consultation with State Parks archaeologists will occur in such circumstances to determine if the recent construction will be removed as part of this scope of work.
- 2. Walls that were disassembled during previous archaeological investigations, and subsequently poorly rebuilt may be discerned during the repair effort and if so, shall be reconstructed to match adjoining sections where original matrix is present.
- 3. If ground deformation, erosion, or soil creep has warped the ground position of the *niho*, or foundations stones of these walls, the foundation stones may not be moved unless the repositioning of the foundation stone is essential to reestablishing structural integrity of the wall.

NPS Agreement Number:

Foundation stones will not be moved until State Parks archaeologists have been consulted and documentation conditions have been defined.

- 4. Bulges in wall faces or other indicators of imminent collapse should be brought to the attention of State Parks archaeologists to determine if intervention through dismantling and rebuilding is warranted to fulfill the scope of work.
- 5. If human remains or other indeterminate faunal remains are encountered during repairs, work will cease within the structure under repair and 1) State Parks will be immediately notified, 2) National Park Service, Pu'ukohola Heiau NHS Superintendent Daniel Kawaiaea will be notified, and 3) State Parks will contact the State Historic Preservation Division in compliance with HRS Chapter 13-300. Remains should be left in place as found and covered with a clean cloth, the area should be reasonably secured and monitored, and workers should re-direct activities to another area within the park.

NOTES

The primary reference source used to develop this scope of work is Archaeological Preservation Plan For Repair and Stabilization of Archaeological Sites Damaged by the October 15, 2006 Earthquakes (Maigret July, 2009).

Exhibit B

Article on the Hawaiian Legacy Program in

Vanishing Treasures 2009 Year-End Report

The Hawaiian Legacy Program Laying the Foundation

Adam Johnson, Pu'uhonua o Hōnaunau NHP
Tyler Paikuli-Campbell, Kaloko-Honokohau NHP
Shane Rumsey, Pu'uhonua o Hōnaunau NHP
Sara Dolan, Pu'uhonua o Hōnaunau NHP
Laura C. Schuster, Hawaii Volcanoes National Park
Walter Wong, Pu'ukohola Heiau National Historic Site and
Mary-Jane Wright, Pu'ukohola Heiau National Historic Site

Pu'ukohola Heiau National Historic Site (PUHE), Kaloko-Honokōhau National Historical Park (KAHO), Pu'uhonua o Hōnaunau National Historical Park (PUHO), and the Ala Kahakai National Historic Trail (ALKA), the four National Park Service Units located on the West Coast of the Island of Hawaii, share many historic preservation needs and goals. Most notable is the need to maintain and care for (malama) the archeological resources located in each park unit. In addition, Kaloko-Honokōhau is mandated to perpetuate Native Hawaiian activities and culture. Although KAHO is the only park unit to have a legislative mandate to perpetuate Native Hawaiian activities and culture, all units are involved in this effort

Much of the history of these parks is facilitated by on-site traditional Hawaiian trades activities such as stone setting, house construction, and canoe and wood image carving that have been demonstrated to park visitors by Native Hawaiians or others skilled in a specific trade. Many of these individuals are employed at the parks as interpreters, maintenance workers, and trade demonstrators. They all contribute to care for, malama, each park's unique resources in a traditional manner. However, the shared concern among our parks is the need to continue transferring traditional knowledge and skills to the next generation and actively train individuals in these trades. With the continual retirement of employees who also have skilled traditional trade knowledge, the parks face the challenge of perpetuating this rapidly shrinking knowledge base.

At KAHO, the park benefited from the expertise of Peter Keka. Peter, from the area of Kaloko, is skilled in the art of uhau humu pohaku or traditional Hawaiian dry-set masonry. This type of masonry involves the laying and setting of stones without the use of mortar or cement, each set stone interlocking with the next. Mon-

Figure 1: Peter Keka in front of the nine-acre Kaloko Fishpond. Peter is skilled in the traditional art of uhau humu pohaku. Photo: Courtesy Kaloko-Honokohau National Historical Park

umental architecture in Hawaii built using this technique has stood for centuries. For the past 12 years Peter has led the masonry crew in carrying out the reconstruction of the Kaloko Fishpond, an eleven-acre constructed feature and one of the park's primary cultural resources (Figure 1). He has shared his knowledge and experience of the area with those who have worked with him for the last 12 years; the next generation continues to work with the park to finish the effort started by the park.

Peter's knowledge ('ike) has also been sought for stabilization and repair of structures located at other park units and on other islands. He has assisted in guiding masons in their effort to preserve the past. He often took the lead of these projects and always shared his knowledge of uhau humu pohaku with staff from the Resources Management and Maintenance Divisions of the various parks and beyond. Although now retired, Peter remains as a respected elder or kupuna.

The traditional trades these parks perpetuate are not limited to dry-set stone masonry. At PUHO the skill of carving traditional Hawaiian images or statues (kiʻi akua) continues to be demonstrated to park visitors by employees of the park and the Hawaii Natural History Association. Several of these images stand in front of the Hale o Keawe temple, a primary interpretive resource of PUHO. To date, park employees have carved three sets of kiʻi akua. As a new set of idols images are needed, the knowledge and skills of carving was passed on from one generation to the next. However, retirement of park staff skilled in these techniques has posed a problem in securing the next carvers to continue that legacy.

In addition to carving, PUHO employees hold knowledge in the building of Hawaiian houses (hale and halau) for specific activities using traditional materials and techniques. The park currently maintains a reconstruction of the Hale o Keawe, originally used as the mausoleum for the remains of chiefs, and several smaller thatched structures, each for different uses. PUHO's maintenance supervisor, Jack Casuga, is a master hale builder and plans to retire in the coming years. Jack is the only individual in the West Hawaii Parks with the knowledge to build and maintain these traditional structures. (Figure 2)

The recent retirement of Peter Keka, and the impending retirement of other master tradesmen, serve as a reminder of the need for park units to recruit and retain tradesmen skilled in traditional



Figure 2: Jack Casuga assisting another NPS employee during the Hale o Keawe restoration project in 2004.
Photo: Pu'uhonua o Hōnaunau National Historical Park

Hawaiian trades. Who will be the next generation of individuals interested in learning these trades? Staff members of the West Hawaii Parks are working to develop a program to serve as a means for the perpetuation of traditional Hawaiian trades and knowledge; it is the Hawaiian Legacy Program (HLP).

Presently, the HLP is composed of group of historic preservation specialists, primarily archeologists and stone masons, whose goal is to establish within the Hawaii Parks a program that will promote and foster the perpetuation of knowledge about traditional Hawaiian trades, including uhau humu pohaku. Our mission statement is:

We are a team of National Park Service preservation specialists who practice traditional Hawaiian skills and trades to perpetuate cultural knowledge and environmental understanding passed on by our Kupuna (ancestors) and to malama (to care for) the unique resources found in Hawaii.

The program builds on a long tradition of managing and rehabilitating archeological sites within the National Park units in Hawaii. Our hope is that the HLP will guarantee the opportunity and responsibility (kuleana) for the transfer of traditional knowledge from trade masters to the next generation of individuals with a desire to learn traditional trades. One way we work to do this is through a primary goal of our program: local community involvement in NPS projects.

Currently, community involvement consists of volunteers assisting with on-going projects, although we are working towards the ability to provide future employment opportunities. Community involvement alongside NPS historic preservation specialists will allow further perpetuation of the trades practiced through dissemination into the larger Hawaiian community.



Figure 3: Volunteers work with Park staff to repair a damaged section of Mailekini Heiau at Puʻukohola Heiau NHS. Photo: Courtesy Puʻukohola Heiau National Historic Site

Recent natural disasters provided a catalyst for the development of the HLP. On October 15, 2006 two earthquakes, magnitude 6.0 and 6.7, caused damage to resources in all of the West Hawaii Parks. In response to these natural disasters, three out of the four West Hawaii parks (PUHE, KAHO, and PUHO) initialized projects to repair the damage to park cultural resources caused by the earthquakes. These projects provided an avenue for the parks to educate and involve local community members and the public about traditional knowledge of Hawaiian trades, specifically dry stone-set masonry.

The earthquake repair project at PUHE provides a prime example of community involvement and public education and outreach.

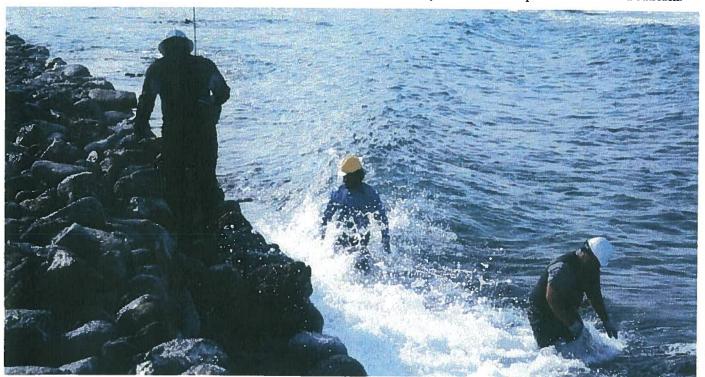


Figure 4: Kaloko-Honokohau NHP Masons working on the Kaloko Fishpond Wall. Photo: Courtesy Kaloko-Honokohau National Historical Park

As a result of the 2006 earthquakes, four of the park's primary resources, including its namesake Pu'ukohola Heiau, were significantly damaged. The park has employed a strategy of community involvement, recruiting committed park partners and Native Hawaiian Cultural practitioners from the local community to work alongside master stone masons and park staff (masons and archaeologists) to accomplish the repair of the park's two primary historic structures: Mailekini Heiau and Pu'ukohola Heiau, (Figure 3) PUHE sponsors bi-monthly workshops, typically involving 30 or more volunteers from across the islands, which focus both on learning and practicing traditional dry-set masonry techniques and an adherence to the cultural protocols that honor these sacred sites. These workshops have been very successful. As a result of this strategy, members of the Hawaiian and local community and National Park Service employees have completed the repair of Mailekini Heiau and are making significant progress towards the repair of Pu'ukohola Heiau. The park anticipates that repair of the collapsed sections of Pu'ukohola Heiau will be completed by August 2010.

Earthquake repair projects at Kaloko-Honokōhau NHP and Pu'uhonua o Hōnauanu NHP and the rehabilitation of the Kaloko Fishpond Wall (Figure 4) continue to provide the opportunity to pass on traditional knowledge to current park staff. As a part of these projects, work crews from KAHO, PUHO, and PUHE had the opportunity to learn dry-set masonry techniques from Peter Keka, often under challenging environmental conditions. At PUHO, these projects included the successful stabilization of the Great Wall and Ka'akapua Heiau located in the historic fishing village of Ki'ilae. (Figure5) Implementation of large-scale stabilization projects such as these has not occurred in PUHO for over 40 years. The invaluable knowledge of uhau humu pohaku passed on to the PUHO employees, many of whom are descendants of the area, gave the staff the much needed hands-on experience to continue implementing these traditional techniques.

The need for the Hawaiian Legacy Program is not only evident at PUHE, KAHO, and PUHO, but also along the Ala Kahakai National Historic Trail--an approximately 175-mile trail extending from near the northeastern tip of Hawaii Island along the west coast around the south point of the Island to Hawaii Volcanoes National Park. At various locations along the trail route, ALKA is working with local communities to help nourish their connection to the lands and the traditions of those lands.

Additionally, the program has begun to take root at parks located on other Hawaiian Islands, specifically at Kalaupapa National His-



Figure 5: Peter Keka supervising stabilization efforts of Ka'akapua Heiau at PUHO.

Photo: Courtesy Pu'uhonua o Hōnauanu National Historical Park



Figure 6: PUHE earthquake project crew members and Kalaupapa residents working on the repair of the walls surrounding Saint Francis Catholic Church.

Photo: Courtesy Kalaupapa National Historical Park

torical Park (KALA) on the Island of Molokai. During the summer of 2009 stone masons and an archeologist from Pu'ukohola Heiau National Historic Site spent two weeks at Kalaupapa National Historical Park. The team from PUHE worked closely with the Kalaupapa community of patients, friends, and family (including from "top side" Moloka'i), in addition to state and federal employees, to repair the walls surrounding Saint Francis Catholic Church, the Bishop Home for Girls, and Saint Philomena Church. (Figure 6) The exchange of information about Kalaupapa by residents and information about traditional Hawaiian dry-set stone masonry and National Park Service Historic Preservation requirements was a great success. Additional work at KALA involving masons and archeologists associated with the Hawaiian Legacy Program is currently being planned to occur this coming summer.

The devastation of the 2006 earthquakes provided a catalyst and opportunity to act on what has been a voiced concern for the four Parks as well as local communities on the island of Hawaii. Due to the damage caused by the earthquakes, the Hawaiian Legacy Program has focused its energy towards traditional dry-set masonry projects. The implementation and completion of these projects illustrate the success of the program. We plan to continue the development of the program, to incorporate other traditional Hawaiian trades and to continue the NPS commitment towards preservation and perpetuation of Native Hawaiian lifeways and culture. The energy, drive, and overall commitment of the individuals who are a part of it remains strong as the Hawaiian Legacy Program begins to take root and grow. The recent retirement of Peter Keka and overall retirement and passing of former park employees skilled in these trades serve as a reminder of the immediate need for the recruitment and retention of tradesmen able to pass their knowledge of traditional Hawaiian trades to the next generation.

We are also hopeful that this program and the impetus to preserve the traditional knowledge amongst the NPS staff and interested partners from our surrounding communities may broaden in the near future to include our other sister parks in Hawaii and the Pacific.